

Title (en)
POLYPROPYLENE HAVING A HIGH MALEIC ANHYDRIDE CONTENT

Title (de)
POLYPROPYLEN MIT HOHEM MALEINSÄUREANHYDRIDGEHALT

Title (fr)
POLYPROPYLENE POSSEDANT UNE TENEUR ELEVEE EN ANHYDRIDE MALEIQUE

Publication
EP 1805238 A4 20090902 (EN)

Application
EP 05810041 A 20051014

Priority
• US 2005036788 W 20051014
• US 61927904 P 20041015
• US 24907005 A 20051012

Abstract (en)
[origin: US2006084764A1] Polypropylene having high maleic anhydride content, between about 5 and about 45 g wt %, may be prepared by first reacting a metallocene-prepared polypropylene having terminal unsaturation with one mole equivalent of maleic anhydride to give polypropylene having a single unsaturation and a terminal succinic anhydride moiety. This product is then reacted with additional maleic anhydride in the presence of a free radical initiator (such as a peroxide or UV radiation) to give a polypropylene with maleic anhydride moieties along the backbone. The polypropylene product does not suffer scission or crosslinking with subsequently undesirable increases in molecular weight or viscosity. The maleic anhydride moieties provide reactivity to the polypropylene and thus expand its uses and applications.

IPC 8 full level
C08F 8/46 (2006.01); **C08F 255/02** (2006.01); **C08F 255/04** (2006.01)

CPC (source: EP US)
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C-Set (source: EP US)
1. **C08F 255/02** + **C08F 222/06**
2. **C08F 8/46** + **C08F 10/06**

Citation (search report)
• [X] WO 9413718 A2 19940623 - EXXON CHEMICAL PATENTS INC [US]
• [X] EP 0391744 A2 19901010 - TONEN SEKIYUKAGAKU KK [JP]
• See references of WO 2006044522A1

Cited by
JP2016511782A; WO2022189647A1; US9695305B2; EP3696214A1; EP2765170A1; WO2014122211A1; WO2023180223A1; EP3495422A1; WO2019110539A1; US11912849B2; EP3495421A1; WO2019110536A1; US11584834B2; EP3333221A1; WO2018104524A1; US10920057B2; EP3199586A1; WO2017129712A2; US10696834B2; EP2602287A1; WO2013083602A1; WO2022157231A1; WO2022157234A1; EP4227361A1; WO2023152375A1; EP2793236A1; EP3495423A1; WO2019110545A1; US11177051B2; US11827758B2

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